

the RARS

Exciter

Raleigh Amateur Radio Society



Worldwide Friendship

April, 2001
Number 366



WRAL TV's
Greg Fishel
Addresses
2nd Annual
SKYWARN
Conference
more on page 4



Next RARS Meeting:
Tuesday, April 2nd

- Hamfest -

Sunday,
April 8th
**RARSFest
2001**
Annual
Begging
Issue

The Exciter

The **Exciter** is the monthly newsletter of the Raleigh Amateur Radio Society. It is available in both printed and electronic form. The printed version is mailed to members just before each club meeting. The electronic form, in Adobe Acrobat PDF format, is e-mailed about a week earlier.

We solicit both articles and advertising. The deadline for submissions is the 15th of the prior month. Contact the Editor.

The views contained in the Exciter are those of the individual authors, and are not necessarily the views of the Editor, or the Raleigh Amateur Radio Society.

The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the Amateur Radio community in the greater Triangle area. In 1999, we incorporated a new RARS, and obtained 501(c)(3) Non-Profit tax status.

The objectives of the club are to promote worldwide friendship through Amateur Radio; to be of public service by providing radio communications in times of disaster, emergency, or civic need; to educate members in radio technique; and to provide training classes to assist in obtaining Amateur Radio licenses.

Anyone interested in Amateur Radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18.00 per year (from July 1 through June 30). Additional immediate family members pay \$5.00 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12.00 per year. Dues for non-licensed Associate members are \$9.00 per year.

Applications for membership may be obtained from the treasurer, or the RARS web site (www.rars.org).

Officers

President	Tim Nicholson KF4RTX 501-7746 kf4rtx@arrl.net
Vice-President	Bob Breyer K1RCB 848-7761 breyer@ix.netcom.com
Secretary	Jeff Wittich AC4ZO 362-9456 ac4zo@arrl.net
Treasurer	Greg Seamster KE4PAX 859-0029 ke4pax@arrl.net
Exciter Editor	Gary Pearce KN4AQ 380-9944 kn4aq@arrl.net



Info

Repeaters:

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146.64
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Web Site:

<http://www.rars.org>

President's Corner

Tim Nicholson KF4RTX

RARSfest!

We Want YOU... to help with RARSFest.

It's hard to believe but April is almost here, which means RARSfest is just around the corner. Everyone I have spoken to has said that they are looking forward to it. It's a time to go shopping and have fun looking at all the neat stuff that's for sale...if you aren't a RARS member.

But if you are a RARS member, RARSfest means it's time to work. I have to agree with Gary KN4AQ when he said that this hamfest isn't for RARS members to enjoy like other hamfests. It's for us to enjoy working.

Hank K4HM and the hamfest committee have done a great job planning for the event over the past several months. As some of you heard at the March meeting, it's time to consider what area or areas you would like to work, such as security or admissions. The jobs aren't difficult. The only qualifications required are a desire to lend a hand and wanting to make RARSfest great.

Last year, we had several folks who signed up for a single shift of two hours, but when they heard we were short-handed, they quickly and willingly volunteered to fill the empty slots. A couple of people ended up staying for the entire day when they had only planned for a couple of hours. I don't want to see that happening this year. We are a club of over 300 members. We should be able to fill all the positions needed without having to beg for others to put in extra time. We need around 100 people who are willing to put in a couple of hours on Friday, Saturday, or Sunday. Volunteer for all three if you like. But please volunteer.

How do you volunteer? It is very simple and painless. Look at the list of committee chairmen on the next page, and contact the person in charge of the job you are interested in working. If you have a question about volunteering, call me, or Hank, or the committee chairman.

Let's make this the biggest and best RARSfest yet! See you there!



Army!?! Heck no!
We Want You for RARSfest!!

Tune In The RARS NEWS HOUR

- Newsline
- ARRL Audio News
- R.A.I.N Report

Sunday Nights following the
RARS 8:00 Net on 146.64

RARSFest 2001

Sunday,
April 8th

**NEEDS
YOU!**

RARSfest 2001 Is Here!

Hank Montgomery K4HM
RARSfest Chairman



Hank K4HM, RARSfest Chairman

Hello everybody! It's RARSfest time.

Sunday, April 8th is the big day - but we need some serious help to pull it off.

This is a **BIG** event, and it takes a lot of work starting on Friday the 6th. There are hundreds of worker hours involved that weekend.

Luckily RARS is a big club with hundreds of members. Notice the match - hundreds of worker hours, and hundreds of members. You can see where this is going.....

We need everyone to pitch in and help. Lets not break the backs of a few dedicated workers. If everyone just works a few hours, we can all have a good time. None of the jobs are hard.

AND - some RARSfest worker will come out a big winner. We have \$100 budgeted as an incentive award. Every 2 hours of work will put your name in the pot for this award. The more slots you work, the better your chances of winning. The drawing will be conducted at the May RARS general meeting.

Please contact one of the following ASAP to schedule time to help RARS:

Security - Ron Ford, KG4FJA
kg4fja@arrl.net 919-772-9127

Admissions - Eric Haywood, KG4CXW
KG4CXW@arrl.net 919-596-9575

Setup - Bernard Blackmon, W4BRB
bernardb@mindspring.com 919-467-8719

Talk-in - Bruce Buck, KC4UQN
kc4uqn@attglobal.net 919-848-4538

RARS Table - Bob Bryer, K1RCB
breyer@ix.netcom.com 919-848-7761

Tear Down - Dave Thomas, K4SAN
k4san@bellsouth.net 919-772-6338

And if you can't get in touch with the staff above, or have other questions, call Tim, and if that fails call me :-)

Chairman - Hank Montgomery, K4HM
k4hm@arrl.net 919-577-1254

Co Chair - Tim Nicholson, KF4RTX
kf4rtx@arrl.net 919-501-7746

Winter Class Prepares for License Test



Mike WA4BPJ teaches series and parallel circuits

The winter RARS class began with seven students, and they're working their way toward the VE exam session at 7:30 on Thursday, April 5th, at the Nortel Technical Educational Center. The VE session is open to anyone who wants to take a test.

And we need RARS members to demonstrate equipment to the students at **Tune In The World Night** on Monday, April 2nd. We'd like to show a variety of HTs, mobile rigs, entry level HF rigs and accessories. Contact Gary KN4AQ if you can help.

RARS Exciter • April 2001



SKYWARN Conference Great!

The 2nd Annual Central Carolina SKYWARN Conference beat expectations and filled the house at Jillian's on February 17. It was an all-SKYWARN month, beginning with a packed RARS meeting for George Lemmons Spotter Training Class. We're ready... *bring on the thunderstorms!*



George Lemmons before a large audience at the Febauary RARS meeting



Central Carolina SKYWARN EC Thomas Babb KF4JKQ coordinated the conference. Thomas is already looking forward to next year



Ashby W5PGX rubs elbows with WRAL-TV's Greg Fishel



NWS speakers included hurricane specialist Joel Klien from Raleigh (above) and Greg Dial, from the National Severe Storms Laboratory in Norman, Oklahoma, who headlined the conference (right)



BRIEFLY

Meteorology, an art for gamblers

Forecaster drums up corps of volunteers

By J. ANDREW CURLISS
STAFF WRITER

RALEIGH — Predicting ugly weather, even with all the new gadgets, radars, satellites and computer models out there, boils down to one thing: guesswork.

There was a rush on grocery stores, but a few raindrops came down instead. In early December, the call was for a foot or more of snow, but none fell in Raleigh. When 18-plus inches came down a year ago, the forecast had been for just more than a dusting.

The science of accurately forecasting severe weather gets murky if the weather is more than a week away. Meteorologists can predict when conditions will be favorable for foul weather a day in advance. Confidence is low, however, for longer-range weather forecasts.

right on our faces."

Lemons was talking Saturday at a gathering of Triangle weather spotters, most of them amateur radio operators who are in a program called Skywarn, a key network of people who pass on details of severe weather as it crosses the region.

The National Weather Service needs the volunteers on the ground to tell meteorologists if hail is falling or how fast the wind is blowing or if a tornado is spinning on the ground. More than 60 people gathered at a restaurant in downtown Raleigh to hear Lemons, other meteorologists and a number of TV personalities talk weather.

"People think we can do it," Lemons said. "Everybody expects us to get it right every time. We get it wrong once, and they ask why we're it wrong. But I wonder this: I see God's green earth

The Raleigh News & Observer covered the conference, but writer Andrew Curliss focused on the difficulty of predicting long term weather. Of course, he noted last year's surprise 20" snowstorm, and this year's storms that didn't happen. He did say good things about hams (see the far right column), but he seemed to miss the point of the conference.

www.CentralCarolinaSkywarn.net



WRAL's Greg Fishel (cover), ABC-WTVD's Gary McGrady (left), WRAL's Mike Moss and NBC-WNCN's Emily Byrd (below) all addressed the conference. Thanks to all the area TV stations for their great support!

George Lemmons again, and Greg Dial and the audience in the, er, colorful room at Jillian's. Jillian's donated the space - thanks!



all photos by KF4JKQ



KG4CXR Featured in April QST

Denyse Walter KG4CXR is using up her 15 minutes of fame this year.

First, she graced the cover of the February *Exciter*, and that really should be enough for most hams. But next, Denyse is featured in the YL News column in the April issue of *QST*. And no, the column is not *QST's* famous annual April Fool spoof article.

Here's how it happened. Diane Ortiz K2DO is the YL News columnist. Diane is also the new chairman of the ARRL's PR Committee. And *Exciter* editor Gary Pearce KN4AQ is a new member of that committee. Gary visited ARRL HQ in January (see last month's *Exciter*) and on the way home, he stopped on Long Island to visit with Diane. He just happened to have a copy of the *Exciter* with him, and Diane spotted Denyse on the cover. Always looking for leads on interesting YLs, Diane jumped on the story, and the rest is publishing history.

In the article, Denyse talks about how she got into ham radio (through SKYWARN) and how she and husband Jim KG4FIJ enjoy public service activity and participating in RARS.

But Denyse only wants one thing - another big storm, to take her back to the NWS office and the "Raleigh Weather" amateur radio station.

MEMBERSHIP CHAIR

Denyse is also RARS' Membership Chairman, responsible for the popular membership cards you've received. She's also been working with Treasurer Greg Seamster KE4PAX, welcoming new members and visitors. Could be that Denyse will single-handedly turn around RARS' reputation as an easy club to get lost in.



Seattle Quake Nets Local TV Coverage

Raleigh TV station WNCN NBC-17 turned to ham radio for a local angle on the Seattle earthquake, thanks to a tip from Thomas Babb KF4JKQ. Reporter Jim Grimes interviewed RARS' Gary Pearce KN4AQ about the possibility of hams here providing

a link to obtain health and welfare type information for people with relatives in the Seattle area. As usual, phone calls into the area were impossible in the days after the quake.

Normally, "inbound" H&W traffic is



discouraged immediately after a disaster, but Gary had been monitoring a 20 meter net that was taking inbound requests, and seemed to be having some success making local phone calls. In fact, Bob K4RLC took advantage of that net to find out that some family members were OK. Gary also provided information on the Salvation Army Team Emergency Radio Network (SATERN) and their web site with a form for requesting aid in contacting relatives. SATERN also operates a net on 20 meters during most disasters around the world.



Wake ARES AECs Meet in March

John Guerriero KG4HDT
Wake Co. AEC/EOC

On March 3rd there was an informal meeting of the Wake Co. AECs to discuss distribution of responsibilities and the status of open projects. Following are the key items of discussion and action items:

KG4HDT and N4TAB discussed their participation in a meeting that took place on Mar 2 at the North Carolina State (NCS) Emergency Operations Center (EOC) with Clay Benton and Mike Montague.

N4TAB discussed the installation of the rooftop grounding system. The sealant selected to weatherproof the installation requires a temperature above 50 F for at least 6 hours to cure. The rotor cable connectors and additional cable were located in the radio room. It was agreed that the earliest possible Saturday be scheduled to install the grounding system. KG4HDT estimated that we would require 4 work sessions to complete the antenna work at the NCS EOC.

A time and date will be selected to measure the RF interference generated by the new elevator motor control systems. The information shall be presented to North Carolina Emergency Management (NCEM).

In addition all ARES/Ham equipment needs to be identified and labeled. All unnecessary ARES/Ham equipment on the rooftop or in the penthouse buildings must be removed along with any debris.

A discussion of the current state of the Wake Co. EOC facility took place and KD4ISF has the action item to call Wake Co. Emergency Management and get an update on the EOC and the new radios.

KD4ISF distributed CDs with the ARES roster in Excel format. A discussion followed as to the best format for the roster. N4MQU took the action item to convert the Excel file to an Access database that will be used to provide a call up list.

KG4HDT reported that he met with our former EC, KG4FJA, and received a data package. KG4HDT has the action item to copy and distribute the information to all other AECs.

It was agreed that all AECs would research new possibilities for a host for the Wake Co. ARES web site.

It was agreed that the AECs shall rotate the

weekly role of net control or the Thursday ARES net. Each week the net control station will present an ARES related topic unless other arrangements are made in advance.

A discussion of local repeater usage revealed that there were uncertainties as to which repeater was to be used in a worst case situation. N4TAB volunteered to research the topic and provide a report at a future meeting.

Wake County ARES



www.wakeares.org

Wake ARES Assistant Emergency Coordinators



John Guerriero KG4HDT



Tom Brown N4TAB



Mark Gibson N4MQU



Bill Ward KD4ISF

VHF/UHF – It goes beyond line of sight!

John Aceti, N1GMV

All of you are familiar with HF propagation and the various Ionosphere layers, but do you know how and why band openings occur on VHF and UHF?

Long distance propagation on bands where none usually occurs is a fascination for me. Just think, 10 watts on a radio that you typically use to simply work into a nearby repeater can actually go several hundreds miles when conditions are right. I know what you're thinking, I am talking about VHF SSB. Yes, and no, in fact I did a few tests with fellow SSB operators and noticed that in most cases if I could hear them just as well on FM as I did on single sideband!

If you're a VHF enthusiast you know that it is difficult to predict exactly when a band opening will occur. But knowing what is needed in the mix will help give you an idea of when you should give an extra special listen! Keep in mind, there is no such thing as a straightforward textbook band opening. You should always listen to see if any beacons are present even when propagation may not look favorable.

In this article I will try and explain some of the types of VHF/UHF band openings that exist and how they occur. Knowing this may give you that extra edge to just maybe catch a great VHF DX contact to add to your log! I will discuss only weather related openings called *temperature inversions*. These are by far the most common, in which VHF/UHF signals refract off of a sharp change in temperature and humidity in the atmosphere.

Yes, VHF frequencies can get actual ionospheric skip using the E layer, but this is extremely rare and complex so I will leave that for a later article.

There are four major types of temperature inversions all of which are in the **Troposphere**. The "Tropo" region stops at around 10Km, far below both the Ionosphere and stratosphere and begins at your feet! In some cases these inversions are only 30 to 50 ft off the ground, and if your antenna is at 100 feet you could miss it all together!

Subsidence Inversion

Subsidence inversions can happen near the end of a long stable period of high pressure, when a high pressure stable air mass remains in place for a prolonged period of time and cool moist air, say from the Atlantic Ocean, moves in near the surface below the subsiding mass of warm dry air from this high. A "sinking" of the high in conjunction with the moist low can cause a sharp

temperature differential (cooler air trapped below the warmer air). This sharp contrast in air temperature produces a substantial refraction of VHF and UHF signals, thus a tropospheric band opening will occur. Although this can happen at any time, it is typically seen in the spring and fall months. This type of opening can enhance VHF/UHF signals to a few hundred miles and can last for up to a few days. This type of band opening is really cool!

Advection Inversion

This type of inversion is almost the opposite of a Subsidence Inversion. This is when a large air mass is moving across surfaces of various temperatures. This can happen in the summer or sometimes winter months when a warm air mass moves over moist, cool air. Fog is typically associated with this phenomenon. The fog is only a few feet from the ground, and just above the fog are warmer temperatures. This, like a subsidence inversion, can enhance VHF/UHF propagations hundreds of miles.

Nocturnal Inversion

This nocturnal or "night time" inversion happens when the land cools faster than the associated air just above it. After a nice warm summer day, the sun sets, and the ground begins to cool rather quickly, also cooling the air closest to it, and maybe causing fog due to this temperature drop. The air mass farther above is still warm and dry. This type of opening only happens over land since water temperatures do not change as rapidly overnight. This is the type of opening VHF/UHF operators typically use when working stations 200 to 400 miles away in the evenings here in the Carolinas.

Frontal Inversion

This inversion occurs during low pressure instead of high pressure type weather. If some small warm and cold fronts and humidity differences are associated in the low, an abnormal propagation along the advancing front may occur. This type of opening is short lived and can be seen when a storm is moving into the area.

So, in conclusion, when we see a drastic temperature change at different altitudes with a little humidity in the mix we could have a Tropospheric opening! Depending on how intense the opening, you could have conditions ranging from where a hand held transceiver can reach a repeater few hundred miles away, to not knowing a band opening is even present.

Here are some of the questions I have asked in the past.

What does one need to work VHF/UHF DX?

I strongly recommend a Sideband radio, second choice being a transverter connected to your HF rig. Although you can work stations far away on FM, most of the big guns are running sideband, thus you can add your ERP to theirs to double the range!

Which is better, Vertical or Horizontal polarization?

At the risk of being jumped on, I will hold my ground and say Horizontal is the only way to go, and here is my explanation why.

Gain and directivity on antennas perform better horizontally, the reasons the specs don't change is probably because they are referenced in open space, something that most of us are not graced with. If we were in space, I suppose it wouldn't matter whether or not both stations were vertical or horizontal as long as they were the same.

But we live here on Earth, so we rarely have true line-of-sight communication when working simplex. We are blessed with trees, buildings hills, and other obstructions that inhibit our signals. From what I have seen, horizontal polarity seems to have a tighter directional pattern, thus more gain, and degrades less when encountering these obstructions. Nearly everyone on 2 meter SSB and higher are horizontally polarized.

How high should my antenna be?

Under only rare occurrences will a VHF/UHF antenna be too high. Therefore I'd have to say the higher the better, within reason of course. You do want to have your antenna above average terrain and should also be above the tree line. In many cases in our area this is not possible. If so, don't worry about it, just concentrate on maximum gain.

Are you saying that I could talk farther without a repeater?

Yes, that is exactly right. Lets take a local repeater for example. Do you typically hear

continued on next page

Line of Sight continued from previous page

stations come into it from 100 to 200 miles away without an opening? VHF/UHF SSB operators with a typical 13 element array can do this without any special tropospheric conditions. How? Well, I have 26 elements providing about 18 dB gain and pointing that at someone with the about the same gain, well, an omni directional vertical cannot compete with this type of power at almost any height.

Okay what about 50 watts though a 10-element beam at 30 feet? How far can I reach typically on 2 meter sideband?

Under normal daytime conditions you should be able to work someone with a similar set up about 75 to 100 miles easily. Double that during a typical nocturnal inversion and triple it if a Subsidence inversion.

Are there many people on 2 meter Sideband?

Well, sad to say no. But keep in mind it is a totally different world there. If you want to go to a crowded band, go to 75 meters where a wet noodle gets you a few hundred miles. VHF/UHF operation is a world all in its own. I have been told that during Aurora and Sporadic E openings, you may not find a quiet place on the band. Other times you could listen all day on the calling frequency and not hear a peep. Many people have 2 meter sideband capability, very few use it.

What about UHF, are there many people up there on Sideband?

Ha! UHF and above is almost done by appointment only. Most operators meet someone on 2 and ask if the other operator has 220/440 or 1296.

I hope this helps answers the mysteries of VHF/UHF propagation. If you would like to know more visit www.vhfonline.com and check into the forums. ■

SAG Drivers Needed for Tour de Cure

Ham Radio operators will provide all the SAG vehicles and drivers for the ADA's **Tour de Cure** 175 mile bike tour on May 5/6. We need radio-equipped vehicles capable of safely carrying two, three or more bikes and riders. Your mileage becomes a tax-deductible donation. See the RARS web page, or contact KN4AQ.

Making a Difference

The story of RARS members who lead, volunteer, participate, in their own words

How I Got To Be Net Manager

Bill Cole KG4CXY

I didn't start with the intent of running any of the RARS Nets (or becoming the RARS Net Manager for that matter). I just wanted to participate in Skywarn. So at a Skywarn training class at the EOC I asked Thomas Babb what could a new Ham do to build experience to run a Skywarn net. He pointed at a gentleman across the room (Cliff Broughton, KF4RTX) and said "see him - he'll set you right up!".

Cliff set me up all right: scheduled a night for me to run the 2-meter Net (but I didn't ask to run a weekly Net!), wished me luck, and put me in touch with another Ham, Jeff Wittich AC4Z0. Jeff saved my life. He set me up with a script, walked me through the clunky net message format, and generally gave me the encouragement to keep after it.

The first night of running the 2-meter Net was worse than I could have imagined. Here I am, a 40 year old man, successful business owner, years of HF radio experience in the Military, a decade of RF Avionics Engineering background, and I'm sweating like an 11 year old kid. I could hardly eat dinner that night. I guess unlike HF, where your contacts are mostly anonymous, with VHF you eventually have to face your audience (at a RARS meeting, for instance). Brought a whole new dimension of pressure to the situation for me.

Five minutes till 8:00 pm, and my stomach is literally in knots. Its amazing the microphone didn't short out from my sweaty hands. The net starts and I recite the preamble and then throw out the call for check-ins. My brain then decides to transpose callsigns up one side and

down the other. With every other check-in I had to ask for a clarification. It was so embarrassing.

OK, maybe I exaggerate here. I'm sure on the listening end it didn't sound nearly as bad as it felt. And within just a couple of weeks, it was amazing how quickly I slipped into a natural delivery flow. (A lot of it had to do with the confidence gained from friendly on-air encouragement on the

part of the net participants!)

Fortunately, with Radio no one can see what you look like, so as long as you *sound* like you know what you're doing, it doesn't matter that you look/feel like hell in those initial experiences.

People tell me that I have a natural voice on the radio. But underneath it all still beats the heart of a Chicken. Guess that's why I'm so

overprotective of all the new net controllers - I can still feel their pain <grin>.

Bill's sweaty-palms story is not intended to scare you away from participation! Many RARS members who have been volunteers or leaders in club and public service activities say they felt nervous at first, too. But they got over it quickly, and went on to gain skill and have rewarding experiences. You'll be reading more of them in future issues.

If you've had this kind of adventure, the EXCITER wants to hear about it!

KG4CXY has gone on to become RARS' Public Service Director, and has encouraged many hams to volunteer and take charge of these important activities.



Bill Cole KG4CXY, RARS Net Manager

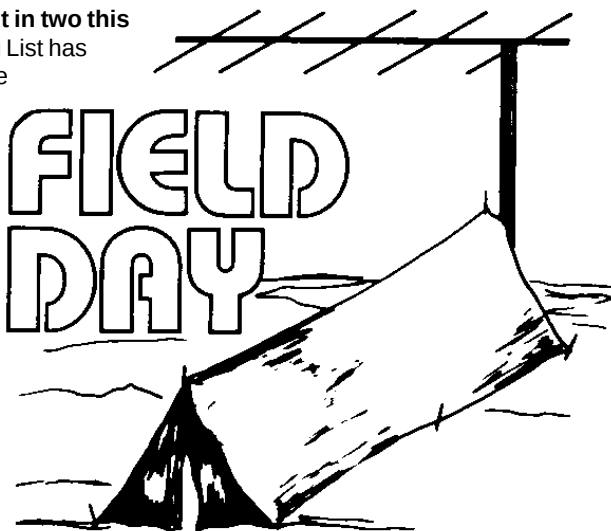
RARS Plans Two FD Operations in 2001

RARS Field Day could be split in two this year. The RARS e-mail Mailing List has hosted a lively discussion on the purpose and value of Field Day, and member's opinions on the best place to set up shop.

At the March Board Meeting, the Board agreed that Mike Murphy WA4BPJ will help lead our usual effort in Apex (W4DW), while Gary KN4AQ will seek permission for a more public second operation, hopefully at the State Capitol on Salisbury St, downtown (W4RNC).

Mike reports that he already has band captain commitments for five stations, but still needs all the bonus point activities and stations (Novice/ Tech, VHF, Alternative Mode, natural power, etc.). Additional station captains are also welcome.

Gary expects a much smaller operation downtown, with one or two stations operating, and a greater focus on demonstration and public relations. Several club members have pledged to help with that operation.



So you have a choice! Or you can operate at both sometime during the weekend.

The mailing list discussion also showed strong interest in setting up demo stations around the area at other times of the year. RARS will be glad to support this kind of operation if there are people to lead it.

Minutes

Club Meeting, February 6th, 2001

The regular meeting of the Raleigh Amateur Radio Society was held on March 3, 2001 at the Forest Hills Baptist Church on Clark Avenue. The meeting was called to order at 7:30p by President Tim Nicholson, KF4RTX who welcomed 70 members and 2 guests.

Being the March meeting, the program scheduled was the annual Birthday Party and Awards Ceremony. Members and guest enjoyed cake and ice cream, and the announcements began at 7:38. Greg, KE4PAX gave the treasurer's report. He said that our membership stands at 308.

Chuck, K4HF said a few words about some recent changes at the ARRL. One item he spoke to was a dues increase that will take effect on July 1.

Hank, K4HM gave a status update on hamfest matters. He described the areas where lots of help will be needed, and circulated sign-up sheets.

With that completing the announcements, at 7:51 the Awards presentation began. The following awards were presented by President Tim Nicholson:

continued on next page

Smith Chart Society to Operate 442.025 Repeater

Frank Lynch W4FAL

The Smith Chart Amateur Radio Society, K4SCS has applied for and received approval for a wide coverage UHF repeater on 442.025, using PL 156.7.

We hope to have the machine operational by the middle of April. The repeater call will be K4SCS.

Until a few months ago, the PCRN linking backbone for eastern NC was on 442.025. Due to some technical and operational issues with having the linking system on a regular repeater channel, the backbone QSY'd to one of several frequencies set aside exclusively for linking.

In the near future, I'll have something on the Smith Chart Web site about the repeater hardware, etc.:

www.qsl.net/w4fal/smithchart

What is the Smith Chart Society? It's a new, local club with a strong technical orientation. You can find out more on their web page, and in next month's Exciter.



**Join Us At The
RARS Dinner**



**Every 4th Tuesday, 6:30 pm at
Fat Daddy's on Glenwood Ave.**

Minutes continued from previous page

Plaques:

Tim Nicholson, KF4RTX - Vice President 1999-2000
(Presented by Jeff Wittich, AC4ZO, Secretary)
Cyndi Pearce, KD4ACW - Hamfest Chair 1993-2000
David Fix, N4YTO - Treasurer 1999-2000

Certificates:

Jeff Wittich, AC4ZO - Contributor to the Society
Gary Pearce, KN4AQ - Exciter Editor
Chuck Littlewood, K4HF - Contributor to the Society
Cliff Broughton, KF4RDP - Webmaster
Denyse Walter, KG4CXR - Membership Services Chair
Greg Seamster, KE4PAX - Contributions to the RARS Classes
Max Bloodworth, KO4TV - Refreshment provider
Jerry Davis, KE4TTS - ARES activities
Dan Atchison, N3ND - Repeater activities
Larry Carringer - Contributions to the Rarsfest

Verbal Recognition:

KG4CXY, K4LNX, KG4FIQ, KD4ISC - Public service contributors.
Class instructors.
W4VFJ - VE team coordinator (who recognized the examiners).
Officers, Board members, and Committee chairs from last year.
Rarsfest volunteers from last year.
Public Service volunteers from last year.
Net Control Operators. Field Day Band Captains.

With that completing the Awards presentation, door prizes were awarded to KO4QH, WB4DRJ, KG4IZA, and KD4ZVW.

The meeting adjourned at 8:21p.

Board Meeting, February 20th, 2001

The monthly Board meeting of the Raleigh Amateur Radio Society was held at the Forest Hills Baptist Church on February 20. The meeting was called to order by President Tim Nicholson KF4RTX at 7:54p. Members present at that time were: KN4AQ, KG4CXR, KG4CXY, K4HF, K4HM, KE4PAX, K1RCB, KF4RTX, and AC4ZO. The total attendance was 14.

On motion by K4HF, seconded by KG4CXY, the minutes of the January meeting were approved.

KE4PAX gave the Treasurer's report. Membership stands at 307.

In the Vice President's report, K1RCB said that the March meeting will be the Birthday Party/Awards Ceremony.

Committee Reports:

KN4AQ reported on FM matters. He said that KA2FWC has been working on the 444.525 repeater, and had it ready to go back on the air. Upon installing it, another problem with the controller was identified, so it's back on the bench. The 220 repeater has been having controller problems as well. It will not be repaired since the repeater may soon be replaced anyway.

KN4AQ reported for the Education Department. He said that the Spring class starts in less than a week, and we are expecting about 5 to 10 students.

KN4AQ reported on the **Exciter**. Gary then announced that he will be stepping down as **Exciter** Editor at the end of the year, because he has received the appointment of **SERA Repeater Journal** Editor. (Gary has recently been appointed to the ARRL National PR Committee. -- Sec.)

KG4CXY gave the Net Manager report. He reported that he has picked up a new substitute Net Control operator. Vince Heffron has taken a position. Net participation has been good, and the 10 meter net is going strong.

Now wearing the hat of the Public Service Manager,

Bill reported that things are going smoothly. Numerous Event Coordinators have volunteered to handle various events, and we are trying to cooperate with other clubs in the area on Public Service Events.

KG4CXR said a few words about Membership Services. She reported a smooth operation in most areas, and she's preparing for the membership renewal period. K4HM reported on the Hamfest committee. The Hamfest is scheduled for April 8. Ticket sales have begun, and he is already receiving mail orders for tickets. Flyers will be mailed this week.

An issue was raised regarding an ATM card for the Treasurer so that he can more easily make deposits and handle other transactions. The Board concurred that this would be a good idea, and had no problem with it.

K4HM spoke about the Awards Committee. A few issues were raised, but things are well ordered, and no problems are expected.

Old Business:

KN4AQ handled an item concerning an ad-hoc FM committee which met last month for the purpose of determining how to proceed with repeater replacement plans. With the proposal falling within budget, the equipment will be ordered.

An old issue concerning the RARS shed was heard. AC4ZO reported on the propriety of moving the RARS equipment to a commercial storage facility. On motion was made by KG4CXY, seconded by K4HF that we rent a 5X10 storage facility for \$51 per month, with the 13th month free upon paying for 1 year, plus insurance costs not to exceed \$100 per year. The motion passed.

New Business:

KE4PAX brought up an item concerning draft payment of two of our monthly bills. A discussion ensued concerning the monthly costs of the expenses, our accounting method, etc. After discussion, it was decided that there would be no problem with doing draft payments to CP&L and Bellsouth.

K1RCB brought a letter from Boyce, Furr & Company, LLP (CPA) detailing our responsibilities concerning donations to the Club.

Comments and Announcements:

Karl, K4LNX announced that PCTN activity is increasing, and he is enjoying his involvement there. KN4AQ announced that our Wake County EC has resigned, and the Assistant ECs are handling the load. K4HM has the RARS logo digitized, and it is available if anyone wants it. KF4RTX announced that he is looking forward to visiting Dalton, GA this weekend where he will attend their hamfest for the first time. That's his home town.

With the business complete, on motion by AC4ZO, the meeting adjourned at 9:50p.

Respectfully submitted,

Jeff Wittich AC4ZO, Secretary

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Snapshots



Hamfest Calendar

April 8: **RARSfest**
April 15: Morganton
May 27: Durham
June 9: Winston-Salem, Franklin VA
July 21: **Cary Swapfest**
July 28: Western Carolina Hamfest



Courtesy of the SERA Repeater Journal

March Gladness

In March, RARS recognizes the club members who go above and beyond to make special contributions to the club and Amateur Radio. Thomas KF4JKQ snapped photos of some of the members who received certificates and plaques.

1. KE4PAX arranged for the classroom for the RARS classes. 2. K4HF handles many jobs at the hamfest. 3. KG4CXR prepared membership

cards and welcomed new members. 4. KO4TV brings donuts each month. 5. K1RCB set up the cake and ice cream (and WA2UZO enjoys it). 6 and 7, AC4ZO and KF4RTX swap awards. Jeff's another member who does more than we can count, and Tim received a plaque for being VP.